

INTRODUCTION

The State and Local Air Monitoring Network Plan provides the results of the annual review of the air monitoring stations in California. These stations house monitoring instruments that measure ambient levels of gaseous and particulate (solid and liquid aerosol) air pollutants. Some of the stations also collect meteorological data. The plan contains updated monitoring information about the types of ambient air quality information that the Planning and Technical Support Division of the California Air Resources Board can provide upon request (aqdweb@arb.ca.gov). The information includes the data availability for air quality and meteorological data, the location of the monitoring stations, and the type of ambient air quality monitoring performed at each monitoring station.

Title 40, Code of Federal Regulations, Part 58 requires the states to review their State and Local Air Monitoring Stations (SLAMS) network annually to ensure continued consistency with the network's specific monitoring objectives defined in the regulations.

The purpose of the air monitoring network plan is two-fold. First, the plan confirms that the network continues to meet the SLAMS criteria established by the above-mentioned federal regulations and that the information in the state and federal monitoring records properly classify each station. Second, the plan serves as a directory of existing SLAMS monitoring and Special Purpose Monitoring (SPM) that is performed at each site. The National Air Monitoring Station (NAMS) network and the Photochemical Assessment Monitoring Station (PAMS) network, both subsets of the SLAMS, are also identified in the report. The U.S. Environmental Protection Agency (U.S. EPA) uses the data from the NAMS to develop national air quality trends.

The NAMS, PAMS, SLAMS, and SPM monitoring stations in the state are operated by the Air Resources Board (ARB), by local Air Pollution Control Districts (APCD) or Air Quality Management Districts (AQMD), by private contractors, and by the National Parks Service (NPS). These entities operate more than 250 air monitoring stations in California. The ARB operates air monitoring stations throughout the state. Most of the local districts operate air monitoring stations within their jurisdictions. In some portions of the state, private contractors operate monitoring stations under contract with businesses that are required by permit conditions to conduct monitoring. The National Park Service also operates a number of air monitoring stations in the National Parks and Monuments throughout California. There are a few monitoring stations located in Tijuana, Mexicali, and Rosarito Playas, Mexico, operated by a contractor for the ARB. The locations of the stations throughout the network are presented in Table 2 and on maps that are included in this report as Figures 1 through 16 starting on page 5-1.

The geographical jurisdiction of different local districts ranges from a portion of a county to several counties. While some local districts have authority to do air monitoring in the single county within their jurisdiction (e.g., San Diego APCD), other districts have authority over more than one county (e.g., Feather River AQMD), and still

other districts have authority over an entire air basin (e.g., Bay Area AQMD). Also note that a number of counties lie in more than one air basin (e.g., Kern County). Some districts have authority to monitor only in the portion of the county within the air basin it resides in (e.g., Northern Sonoma County APCD), and some have authority to monitor an entire county that spans two or more air basins (e.g., South Coast AQMD).

In late 1984, the ARB established statewide ambient air toxic monitoring to facilitate the identification and control of toxic air contaminants in California, pursuant to 1983 amendments to the Health and Safety Code (AB 1807 Tanner). As of December 1999, the ARB and one local agency, the Bay Area AQMD, were conducting toxics monitoring at 34 air monitoring stations in the state. The ARB's sampling network consisted of 21 stations located throughout California. Some of the stations in the ARB sampling network contain ARB monitoring equipment operated by local district staff. The ARB's network consists of stations located in the San Francisco Bay Area, South Coast, San Diego, South Central Coast, Sacramento Valley, and San Joaquin Valley Air Basins.

On June 30, 1999, the ARB submitted the 1999 California Particulate Matter Monitoring Network Description to the Regional Administrator of the U.S. EPA Region 9 for approval. This plan is the first annual update to the 1998 California Particulate Matter Monitoring Network Description. (Copies of California Particulate Matter Monitoring Network Description can be downloaded from our PM2.5 web site at <http://arbis.arb.ca.gov/aqd/pm25/pmf99proposal.htm>.) These documents include the existing and proposed monitoring networks for PM10 and PM2.5. The term PM10 applies to airborne particles with aerodynamic diameters less than 10 microns, and PM2.5 applies to airborne particles with aerodynamic diameters less than 2.5 microns. As a result of 1998 funding, 78 PM2.5 sites have been deployed. All but five of these sites have started collecting data. Additional funding was allocated in 1999 for four more sites.

The State and Local Air Monitoring Network Plan contains two tables, a map section, an appendix, and a glossary. Table 1 lists the range of years of ambient air quality and meteorology data that are available for monitors that have been active at any time between 1990 and 1999. If the ARB has not yet received PM2.5 data for a site, an 'X' is used to indicate that a PM2.5 monitor was planned to begin operation during 1998 or 1999.

Table 2 includes several types of useful information about each monitoring site, including several attributes of each criteria pollutant monitor, the meteorological data availability, site location information, and the operating agency. (A criteria pollutant is a pollutant which has National Ambient Air Quality Standard (NAAQS) to protect public health and welfare.) The sites included in Table 2 are those that have been in operation at some time since 1990.

The monitor information listed for the criteria pollutants includes the network designation, sampling or analysis method, spatial scale, and monitoring objective. Only

monitoring methods that are considered to be reference or equivalent methods by both the U.S. EPA and the ARB are included in Table 2. For example, tapered-element oscillating microbalance (TEOM), beta attenuation method (BAM), and dichotomous samplers, considered equivalent for collecting PM10 data by the U.S. EPA but not by the ARB, are not included in Table 2.

Table 2 also indicates the SLAMS and SPM air monitoring stations that collect and submit meteorological data to the ARB, and the types of data collected. Meteorological monitors for which data are available at some time from 1990 through 1999 are included.

In addition, Table 2 contains a list of geographical locations for sites open at any time since 1990. The locations are specified by latitudes and longitudes, as well as by elevations in meters. The elevation data have not been reviewed and are preliminary. For some sites, not all of the location information is available.

The appendix contains lists of dichotomous elements, nonmethane organic compounds (NMOC), and toxic compounds for which data are available. Air monitoring terminology used throughout the two tables is described in the glossary under the categories of Pollutant, Meteorological Parameter, Monitor Designation, Sampling or Analysis Method, Spatial Scale, and Monitoring Objectives.

The two tables in this report are organized alphabetically by air basin. Within each air basin, the counties are arranged in alphabetical order, and within each county the monitoring sites are also arranged in alphabetical order. The map section is also arranged alphabetically by air basin. For quick referencing between Tables 1 and 2, information for the same site can be located on respective pages within Table 1 and Table 2. For example, a site listed in Table 1 on page 3-17 will be listed in Table 2 on page 4-17. Table 1 and 2, the glossary, and the appendix are new to the report this year.